2002 National RCRA Meeting

Partnerships for Cleaner Communities

January 15, 2002

Amy L. Edwards, Esq.
HOLLAND & KNIGHT LLP

Daniel Patulski
EPA REGION V

Corrective Action and Institutional Controls

Institutional Controls Are an *Integral Part* of Remedy Selection

Corrective Action and Institutional Controls

Institutional Controls Need to be Considered *Early* in the Remedial Action Process with the Ultimate *End Use* in Mind

Corrective Action and Institutional Controls

There are No Silver Bullets

(Nor Are There Likely to be Any, Anytime Soon)

Corrective Action and Institutional Controls

- Deficiencies in Implementation/ Enforcement of ICs Have Been Well Documented in Recent Years.
  - ELI Study, “Protecting Public Health at Superfund Sites: Can ICs Meet the Challenge?” (July 2000)
  - ICMA Study, “Beyond Fences: Brownfields and the Challenge of Land Use Controls”
  - EPA IC Fact Sheets (October 2000) and Workshops (2001)
  - CPEO Forums (February & June 200)
  - National Research Council Study (September 2000)

Corrective Action and Institutional Controls

ICs Raise Four Types of Concerns:

- Implementation Issues
- Notice to Stakeholders
- Enforceability
- Long-term Stewardship

Corrective Action and Institutional Controls

- Questions re *Implementation* and *Notice* Have Made ICs Frustrating for the Regulated Community.
  - Poor Tools Which Vary Widely From State to State (Common Law, Deed Notices, Statutes)
  - Poor Model Documents/Language
  - Lack of Notice in
    - Phase I ESAs
    - Title Reports
  - Particularly Difficult With Large Plumes/Offsite Issues

Corrective Action and Institutional Controls

- Questions re *Enforceability* Have Made ICS Frustrating for Regulators
  - ICs Need to "Run With Land"
  - Federal Government Can't Acquire Property Interests
  - States and Locals Lack Resources to Inspect/Enforce

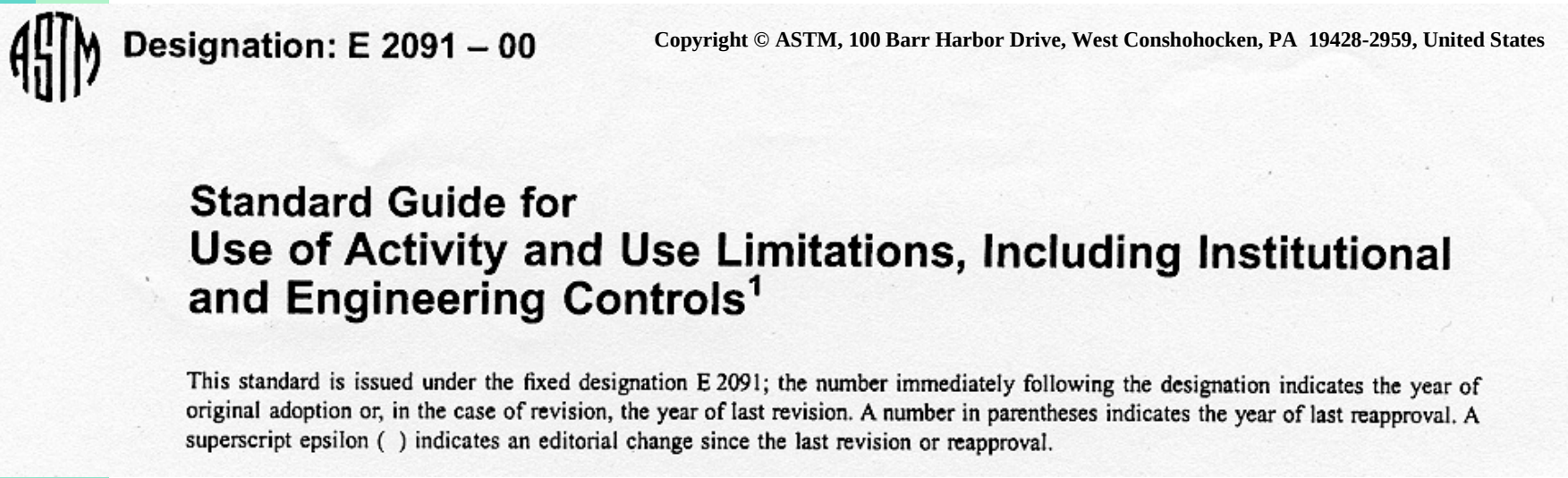
Corrective Action and Institutional Controls

- Tools Are Under Development to Address Implementation, Enforcement and Stewardship Issues
  - Proposed Model Law on Environmental Covenants (NCCUSL; expected 2003)
  - Guardian Trust Pilot
  - ESTM/GIS Tracking System
  - One Call Systems

Corrective Action and Institutional Controls

- ASTM's E2091-00
  - Provides *Framework for Analysis* of Existing Options and Tools

Corrective Action and Institutional Controls



Designation: E 2091 – 00

Standard Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls[1]

This standard is issued under the fixed designation E 2091; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( ) indicates an editorial change since the last revision or reapproval.

For further information, contact:
www.astm.org
or
Dan Smith at ASTM
610 - 832 - 9727

ASTM E2091 - Fig. 1

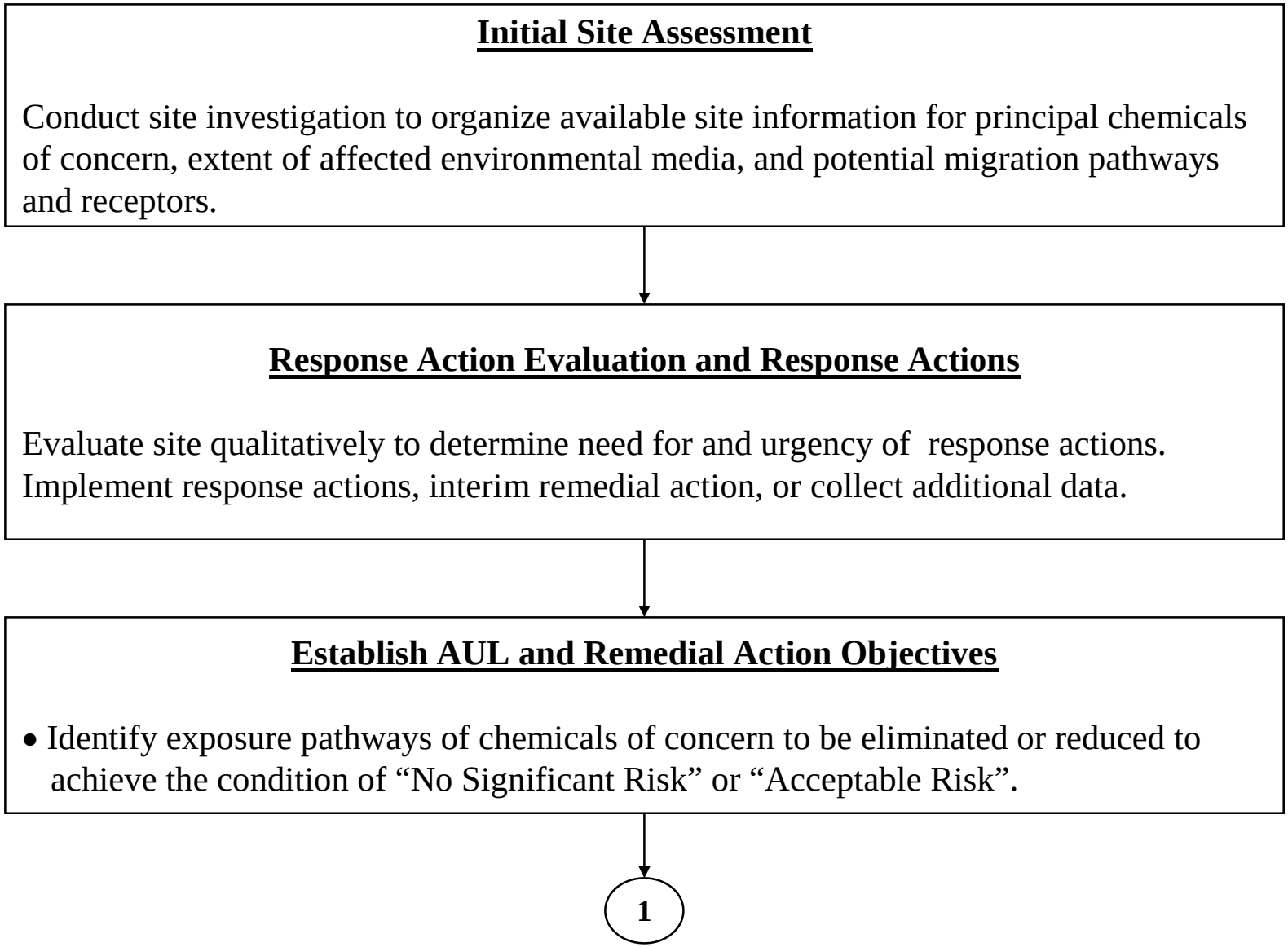


FIG. 1 Activity and Use Limitation Selection Process Flowchart

ASTM E2091 - Fig. 1

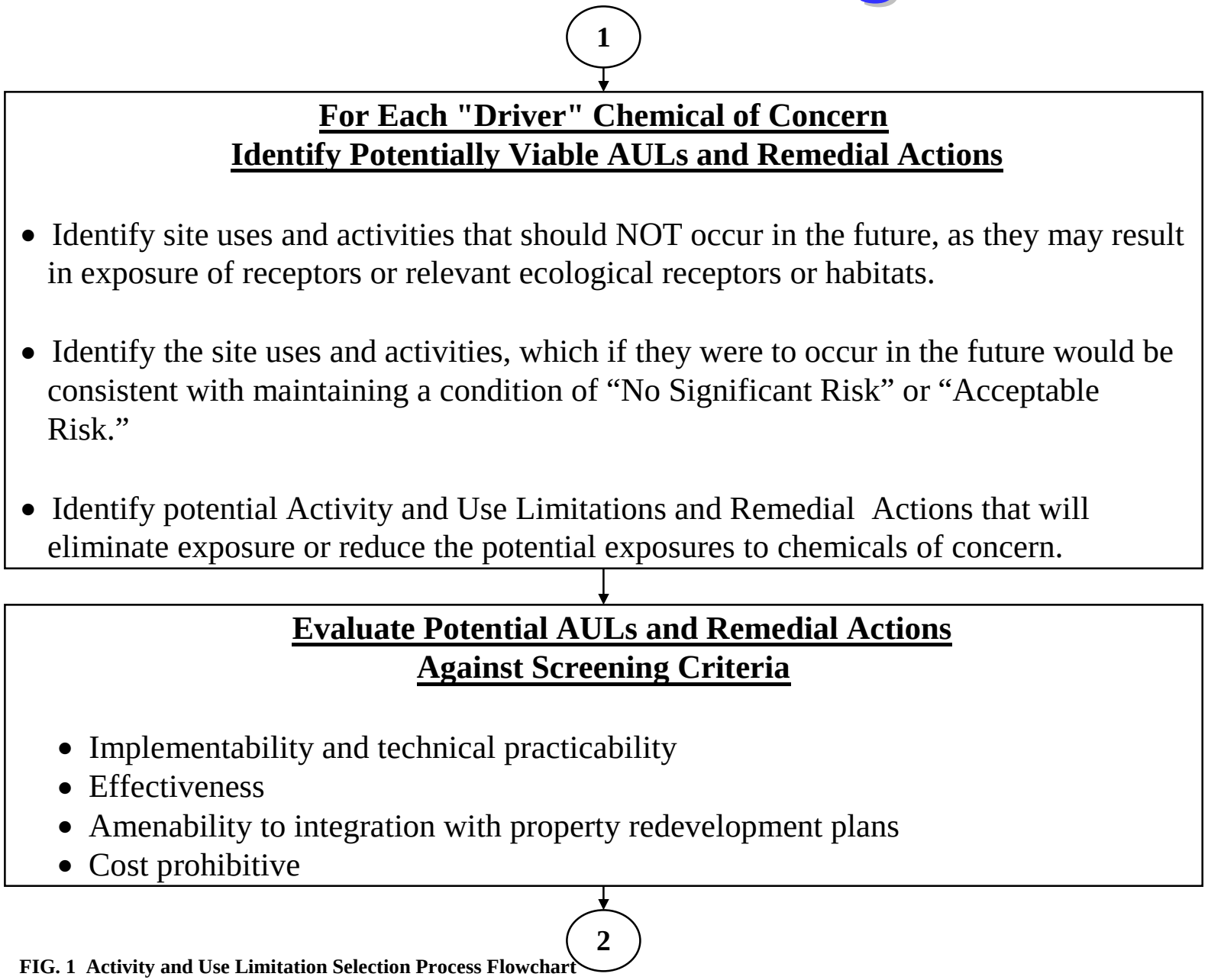
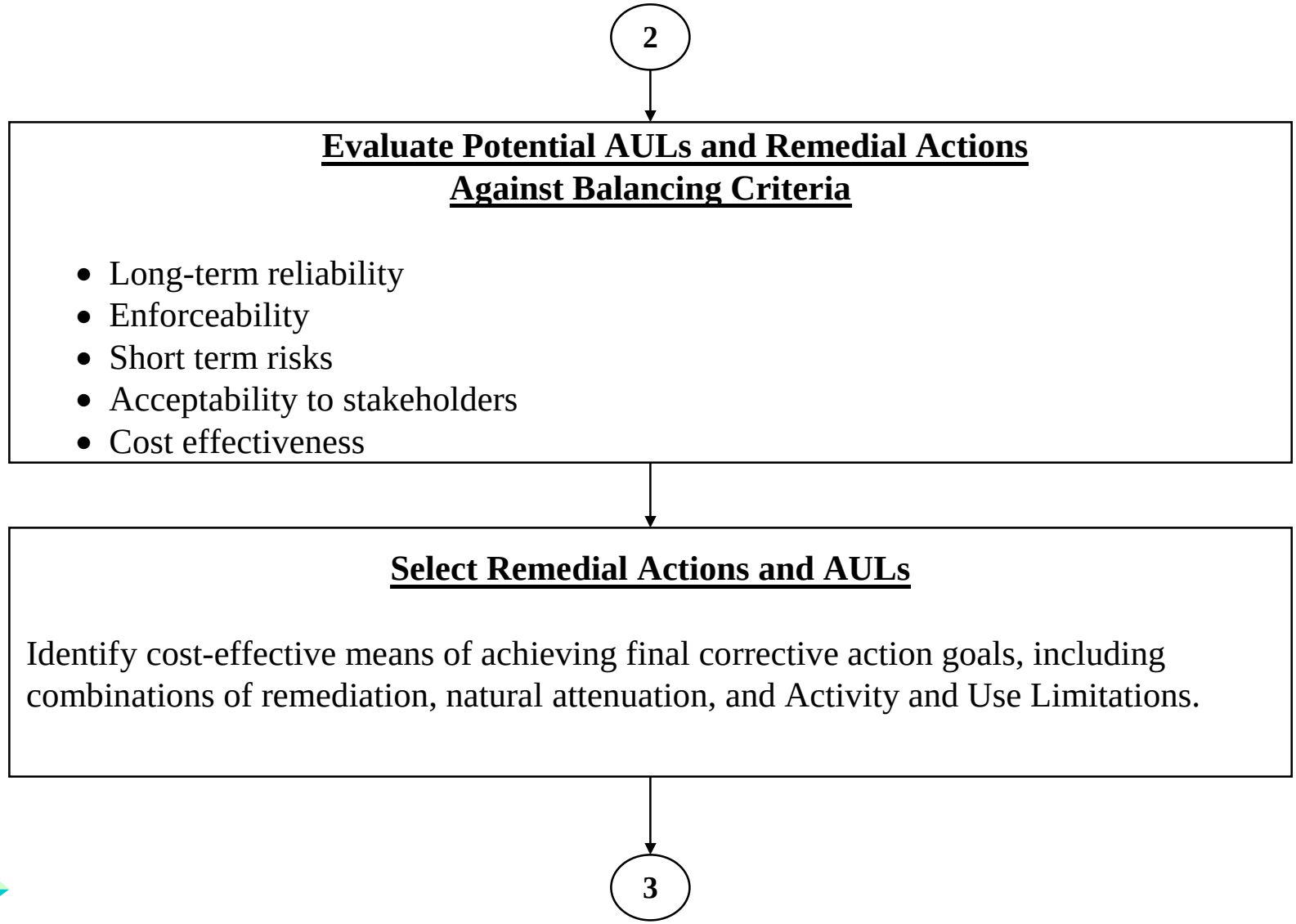


FIG. 1 Activity and Use Limitation Selection Process Flowchart

ASTM E2091 - Fig. 1



ASTM E2091 - Fig. 1

3

Implement Remedial Actions and AULs

- Provide notice to property owners, holders of interests in the property, title companies, appraisers and others of the presence and location of chemicals of concern that may be present on site.
- Specify obligations, such as operation and maintenance obligations, or monitoring of an engineering control, to ensure that the objectives of the Activity and Use Limitation continue to be met.

Monitor AUL Compliance and Enforce AULs

- All AULs require some degree of monitoring and enforcement in order to ensure compliance.
- An appropriate entity must be identified to enforce compliance for both current and future uses as necessary.
- Monitoring additionally allows for termination of AULs if “No Significant Risk” or “Acceptable Risk” can be achieved without the use of an AUL.
- A failure of the AUL or a Remedial Action to achieve “No Significant Risk” would require the AUL selection process to be re-initiated.

Corrective Action and Institutional Controls

- Upcoming ASTM Training Sessions

April 19, 2002 - Pittsburgh, PA

October 18, 2002 - Norfolk, VA

Corrective Action and Institutional Controls

- EPA Region V Guidance Issued in March 2000
  - Strong Emphasis on Enforceability
    - State Lead Sites May Use Common Law/ Property Law
    - Federal Lead Sites Must Use Permits and Orders

Corrective Action and Institutional Controls

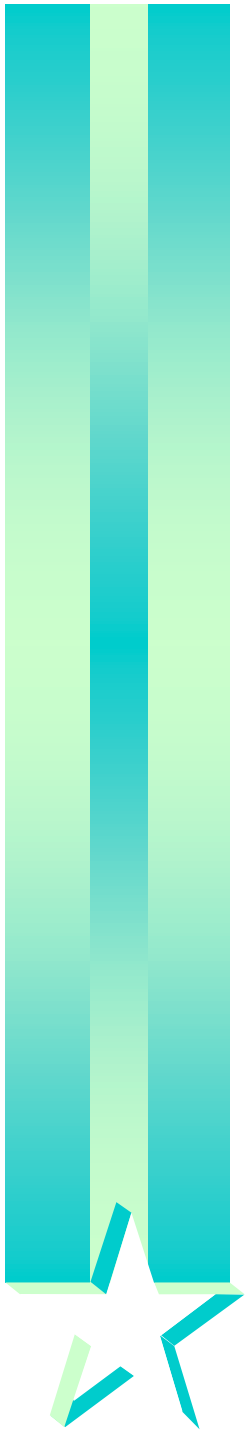
- EPA Region V Developed a 7003 Order to Enforce ICs
  - Makes the Respondent Responsible and Liable for Failure to Comply with Order
  - Contents
    - Listing of the Controls
    - 90 Days Notice to EPA Before Property Transfer
    - Changes in 0/0 Will Not Change Respondent's Obligations
    - Respondent Must Notify EPA of Changes in Government Controls That Impact Property Use

Corrective Action and Institutional Controls

- Region V Initiated a Pilot With Ohio in the Summer of 2001 to Improve Reliability and Enforceability of ICs
  - Partnership Using:
    - 7003 Order
    - State Property Law (Equitable Servitude)
    - State as a Third Party Grantee

Corrective Action and Institutional Controls

- Draft Model Equitable Servitude Has Been Developed
- Order Would Be Used at:
  - –Federal Lead Permitted Sites
  - –Voluntary Corrective Action Sites
  - –Some Superfund Sites
- Order Will *Not* Be Used at RCRA Sites Where a Section 3008(h) Order is Being Used



Case Study No. 1

Industri-Plex NPL Site, Woburn, MA

- Site was formerly used to manufacture chemicals and glue from animal hides
- Chemicals of concern:
  - In Soil: metals (arsenic), lead and chrome
  - In Groundwater: VOCs and arsenic
  - In Air: hydrogen sulfide gases from animal hides
- Remedial action:
  - Permeable and impermeable caps
  - Ground water treatment to address “hot spots”
  - Implementation of AULs
  - Fencing and warning signs

Industri-Plex NPL Site, Woburn, MA (Cont'd)

- Implementation of AULs:
  - 245 acre site was divided into 4 types of properties:
    - Class A: "clean;" no impacted soil; potential groundwater concerns
    - Class B: soil contained COCs above state levels
    - Class C: capped portions of site; no groundwater use
    - Class D: animal hide sites; no development allowed; no groundwater use either

Industri-Plex NPL Site, Woburn, MA (Cont'd)

- Transactional Issues
  - Site was subject to a Consent Order and ROD under CERCLA
  - State has strong VRP
    - Grant of Environmental Restrictions and Easements
    - EPA and Mass DEP will have authority to enforce
  - Property owners must do quarterly inspections
  - AULs must be incorporated into deeds, mortgages, leases, easements, etc.

Case Study No. 2

Automobile Dealership in Virginia

- Site of former concrete manufacturing facility and landfill (13 acres)

- Chemicals of concern:
  - Fill 1 (0-10 ft.) and Fill 2 (10+ ft.)
  - In Soil: metals (arsenic, beryllium, cadmium, chromium, lead, mercury, zinc) and semi-VOCs (PAHs)
  - In Groundwater: None

Automobile Dealership in Virginia (Cont'd)

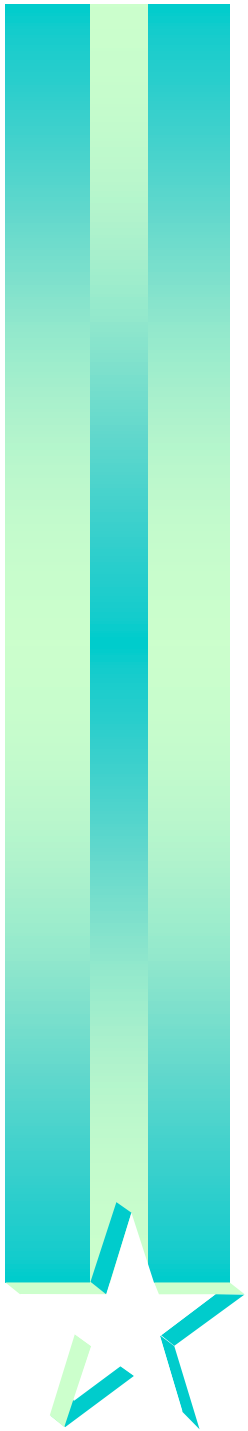
- Remedial Action:
  - Automobile dealership was constructed on site to serve as "cap"
  - Methane degassing system
  - Additional risk assessment was performed to accommodate change in depth of certain pipes
  - Implementation of Health and Safety Plan during construction

Automobile Dealership in Virginia (Cont'd)

- Implementation of AULs
  - Certificate of Satisfactory Completion of Remediation contains these conditions:
    - No excavation deeper than 5 feet unless risk assessment is prepared/approved
    - No residential use of site
    - No use of groundwater
  - Certificate is recorded in the local land records

Automobile Dealership in Virginia (Cont'd)

- Transactional Issues:
  - State has strong VRP, but city would not enter into restrictive covenants
  - Installation of pilings ≠ excavation
  - Restrictions were contained in a Deed of Ground Lease between owner and tenant and in a Memorandum of Lease in recordable form incorporating the same restrictions
  - Difficult to persuade engineer of importance of adhering to excavation limits in original plans; additional risk assessment needed for biofiltration ponds.



Document number for this document

-1047500